

## EXECUTIVE SUMMARY

The purpose of this Act 537 Plan (Plan) is to address the wastewater disposal needs of Strasburg Township, Lancaster County, Pennsylvania. The planning area for this Act 537 Plan is Strasburg Township in its entirety.

An evaluation of existing on-lot disposal systems (OLDS) throughout the Township indicated that there is a need for improved wastewater disposal in the Refton Study Area and the Creekview Study Area of the Township. The results of the sanitary surveys are summarized in Chapter 3. The maps summarizing the results of the surveys are included in Appendix H and complete results of the sanitary surveys are presented in Appendix D.

The two (2) study areas were identified based on needs derived from previous planning, number of OLDS malfunctions, well water sample results, and relatively small lot sizes located in dense residential areas. Descriptions of each respective study area are presented in this Plan. Structural alternatives for providing improved sewage facilities to these study areas were evaluated on the basis of environmental soundness, cost-effectiveness, and structural feasibility.

The following summarizes the wastewater planning needs and recommendations of the Plan:

**1. Strasburg Township shall continue to enforce the On-lot Management Ordinance governing the management of on-lot disposal systems (OLDS) within the Township.**

As discussed in Chapter 3, a low percentage of confirmed on-lot malfunctions were observed during the sanitary survey completed in this Plan. The implementation of the Township's On-lot Management Ordinance may be responsible for preventing the malfunction of on-lot systems as the Ordinance provides for the inspection, maintenance, and mandatory pumping of on-lot systems. The Township should continue to enforce the Ordinance in areas of the Township served by OLDS to prevent the malfunctioning of the OLDS and to preserve the water quality of private well supplies.

For continued implementation of the Township's On-lot Management Ordinance, it is recommended that the Township consider amending the ordinance to include OLDS maintenance districts to establish a pumping and inspection schedule to assure the long-term operation of the existing and proposed on-lot disposal systems in the Township and to preserve the water quality of the private wells. It is suggested that the Township be divided into three (3) districts, designated as OLDS Management District 1, 2, and 3 as shown on the OLDS Management District Map (see Map in Appendix F). By dividing the Township into districts, the Township's certified SEO will have a more manageable number of systems to inspect on an annual rotating basis. The Township may consider amending the current On-lot Management Ordinance after adoption of this Plan.

**2. Public sewer service should be provided in the Refton Study Area and in the Creekview Study Area when adequate public funding becomes available.**

As discussed throughout this Plan, the Refton and Creekview Study Areas are the only areas of the Township currently utilizing OLDS which currently requires an upgrade of sewage facilities to correct malfunctioning OLDS. The structural alternatives evaluated in this Plan to provide public sewer service to these Study Areas represent technically feasible solutions for wastewater management in these areas. Of the identified alternatives for the Refton Study Area, it is recommended that the Township pursue Alternative 1A. This alternative is environmentally sound, resulting in the abandonment of malfunctioning OLDS in the area, is consistent with all local, regional, and state planning objectives. This alternative provides for a low pressure sewer system to serve the Village of Refton and convey all wastewater to a proposed biological nutrient removal wastewater treatment facility. The wastewater treatment facility will consist of a series of septic tanks, recirculating sand filters, constructed wetland, and final effluent disposal via in-ground drainage beds.

As previously discussed, connection of sewage facilities to the Strasburg Borough Authority (SBA) system for the Creekview Study Area is contingent upon a favorable inter-municipal agreement. Completion of an inspection and evaluation of the existing sewer facilities would be required prior to connection to the SBA system. This alternative also results in the abandonment of malfunctioning OLDS in the area where there is high density development with limited lot sizes for replacement OLDS.

**3. S.R. 896 Designated Growth Area will utilize developer built sewer extension(s) for all new development, connecting existing properties where appropriate, and will continue to utilize OLDS for sewage disposal until new developer connections are available.**

The sanitary sewage surveys and well water sampling conducted as part of this Plan's preparation indicate that the S.R. 896 DGA do not require immediate sewage facilities upgrades. The alternatives evaluated in this Plan for the S.R. 896 DGA are to be considered as needed for correcting malfunctioning OLDS and/or for accommodating projected commercial and residential development in conformity with the Strasburg Region Comprehensive Plan.

In the case of new development in the S.R. 896 DGA, sewage facilities shall be provided by the developer at their cost with laterals/points of connections for existing residential and commercial properties along proposed sewer extensions to connect to either the SBA system or the Hershey Farm PWWTF for treatment. The developer shall negotiate all agreements for connection to the SBA system or the Hershey Farm PWWTF with the participation and approval of the Township. Sewage facilities built for the S.R. 896 DGA shall be adequately sized for the future connection of the existing residents and businesses currently utilizing OLDS as well as planned and projected development in the S.R. 896 DGA. This will be enforced through the Subdivision and Land Development approval process.

The Township's SEO will continue to direct the repair of malfunctioning OLDS in accordance with DEP rules and regulations. Additionally, the continued implementation of the Township's On-lot Management Ordinance is expected to reduce the number of OLDS and well water contamination observed in these areas.

**4. Strasburg Township shall adopt an ordinance requiring mandatory connection of commercial and residential structures in the Township to public sewer when available.**

In order to improve the quality of water supplies, protect public health, and increase the feasibility of public sewer service for the Township, an Ordinance shall be passed by the Township, mandating commercial and residential structures located within 300-feet of public sewer to connect to the public sewer system.

The estimated project cost of the recommended structural alternative for the Refton Study Area (Alternative 1A) is approximately \$2,827,600.00. The estimated project cost for the Creekview Study Area is to be determined based on the inspection and evaluation of existing sewer facilities prior to connection to the SBA's system, as previously discussed. To implement these structural alternatives while maintaining a reasonable user rate, a financing plan consisting of the payment of tapping fees from new connections, grant money, and a low interest (PENNVEST, R.U.S., etc.) loan or any combination is necessary.

Strasburg Township does not currently have sufficient staffing and resources to implement the selected structural alternatives. The Township will need to evaluate options for future operation of sewer facilities such as forming an operating authority, pursue the formation of a joint sewer authority with the Strasburg Borough Authority (SBA), or hiring additional staff or contracting operators, prior to implementing any structural alternative.

The implementation of the selected structural alternative (Alternative 1A) for the Refton Study Area shall be completed in accordance with the projected implementation schedule shown below, assuming adequate funding is secured. This alternative will require an administrative organization that has the legal authority to incur indebtedness on behalf of the project, can guide the project to completion, and provide the necessary operation and maintenance for the improvements. If the Township deems it beneficial, an authority could be formed to administer, finance, and operate the municipal sewage facilities. Without favorable funding in the form of grants and low-interest loans, this alternative is not financially feasible and will not be implemented.

The implementation of the structural alternative for the Creekview Study Area (Alternative 2A) shall be completed in accordance with the schedule shown below assuming that a favorable inter-municipal agreement with SBA can be negotiated. Without favorable inter-municipal agreement this alternative is not feasible and will not be implemented.

The following activities shall be undertaken to ensure successful implementation of the selected alternative within the specified time frames:

<b>Recommendation 1 – On-Lot Sewage Management Ordinance Amendment Schedule</b>	
<b>Year(s)</b>	<b>Activity</b>
0 – 1	Amend On-Lot Sewage Management Ordinance to include three (3) OLDS Management Districts to establish a rotating pumping and inspection schedule.
1 to Date of Connection to Public Sewer	Continue to implement On-lot Sewage Management Ordinance

<b>Recommendation 2 - Construction of Public Sewers for Selected Alternative – Refton Study Area</b>	
<b>Year(s)</b>	<b>Activity</b>
0 – 2 <sup>(1)</sup>	Design, Permit, and Pursue Funding Opportunities for the Recommended Structural Alternative
2 – 4 <sup>(1)</sup>	Construct Refton Sewer System (Alternative 1A)
5 <sup>(1)</sup>	Refton Sewer System Fully Operational

*Note 1:* Only feasible if favorable funding can be secured. Without favorable funding, this alternative will not be implemented.

<b>Recommendation 3 - Construction of Public Sewers for Selected Alternative – Creekview Study Area</b>	
<b>Year(s)</b>	<b>Activity</b>
0 – 5 <sup>(1)</sup>	Inspection and Evaluation of the Existing Sewer Facilities; Negotiate Inter-municipal agreement with SBA
5 – 7 <sup>(1),(2)</sup>	Design, Permit, and Pursue Funding Opportunities for Construction of Facilities (as necessary)
7 – 9 <sup>(1),(2)</sup>	Connect Creekview Sewer System to SBA System
10 <sup>(1),(2)</sup>	Creekview Sewer System Fully Operational

*Note 1:* Only feasible if favorable inter-municipal agreement with SBA can be negotiated.

*Note 2:* The structural alternative for the Creekview Study Area is contingent upon the inspection and evaluation of the existing sewer facilities prior to connection.

<b>Recommendation 4 – Mandatory Connection Ordinance Schedule</b>	
<b>Years (s)</b>	<b>Activity</b>
0-1	Adopt Mandatory Connection Ordinance